No results when R1 = (3):

=> fil req

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## http://www.cas.org/support/stngen/stndoc/properties.html

=> d que 114

L9 STR

VAR G1=7/8/9/25/24/23/22/26/28/13/15/16/17 REP G2=(0-6) A VAR G3=40/38 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 7 20 13 26

NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE

L10 ( 3407)SEA FILE=REGISTRY SSS FUL L9

L11

1 STR

бн **н**о**~**§**~**G1**~**Cy**~**G2

013 14

<sub>@</sub>A<sub>7</sub>~~<sup>15</sup>

A G1 X A X C == 0 9 1 1 1 1 2 1 2

REP G1=(0-20) A
VAR G2=13/7/9
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 4
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L12 ( 2289)SEA FILE=REGISTRY SUB=L10 SSS FUL L11 L13 STR

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 1

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE L14 0 SEA FILE

0 SEA FILE=REGISTRY SUB=L12 SSS FUL L13

### 3 cmpds and 5 references when R1 = (2):

=> fil cap FILE 'CAPLUS' ENTERED AT 10:43:56 ON 02 JUN 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (0) 2009 AMBRICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 2 Jun 2009 VOL 150 ISS 23
FILE LAST UPDATED: 1 Jun 2009 (20090601/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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#### http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

VAR G1=7/8/9/25/24/23/22/26/28/13/15/16/17 REP G2=(0-6) A

VAR G3=40/38 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 7 20 13 26 NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE

L4 ( 3407)SEA FILE=REGISTRY SSS FUL L3

L5 STR

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013 14

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A×G1×A×C=

REP G1=(0-20) A
VAR G2=13/7/9
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 4
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 4
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L6 ( 2289)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
L7 STR

REP G1=(0-20) A
VAR G2=1/7/13/27/29
VAR G3=1/7/13
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 2 8 14 NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE

L8 3 SEA FILE=REGISTRY SUB=L6 SSS FUL L7
L28 5 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L8

### => d 128 ibib abs hitstr tot

L28 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:757721 CAPLUS Full-text

DOCUMENT NUMBER: 149:288646

TITLE: Palladium(II)-catalyzed intramolecular addition of

arvlboronic acids to ketones

AUTHOR(S): Liu, Guixia; Lu, Xiyan

CORPORATE SOURCE: State Key Laboratory of Organometallic Chemistry,

Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai, 200032,

Peop. Rep. China

SOURCE: Tetrahedron (2008), 64(30-31), 7324-7330

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 149:288646

NB A palladium(II)-catalyzed intramol. addition of arylboronic acids to ketones was developed. Compared to the Pd(OAc)2 catalysis system, a cationic palladium complex with dppp as the ligand has higher catalytic activity and efficiency for a wider scope of substrates. From this reaction, the normal addition product or the dehydrated product could be selectively obtained as controlled by additives. Highly optically active cyclic tertiary alcs. (up to 96% ee) can be obtained by using a chiral cationic palladium complex as the catalyst. Preparation of arylboronic acids from 2-iodophenol and α-bromo ketones.

TT 1048361-14-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

RN 1048361-14-3 CAPLUS

CN Boronic acid, B-[2-[(2-oxocyclohexyl)oxylphenyl]- (CA INDEX NAME)



REFERENCE COUNT:

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:1306880 CAPLUS Full-text

53

DOCUMENT NUMBER: 149:402178

TITLE: Cationic palladium-catalyzed [5+2] annulation:

synthesis of 1-benzoxepines from 2-aroylmethoxyarylboronic acids

AUTHOR(S): Liu, Guixia; Lu, Xiyan

CORPORATE SOURCE:

State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep.

China SOURCE:

Advanced Synthesis & Catalysis (2007), 349(14+15),

2247-2252

CODEN: ASCAF7; ISSN: 1615-4150 Wiley-VCH Verlag GmbH & Co. KGaA

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

CASREACT 149:402178 OTHER SOURCE(S): GT

$$\text{P}_{\text{OH}}^{\text{B}\,\text{(OH)}\,2} \text{CF3}$$

The synthesis of 1-benzoxepines, e.g., I, from 2-aroylmethoxyarylboronic AB acids, e.g., II, and alkynes in the presence of a catalytic amount of [Pd(dppp)(H2O)2]2+(TfO-)2 was developed. This [5+2] annulation involves the intramol. nucleophilic addition of a vinylpalladium species to ketones.

1048361-14-3

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of benzoxepines via cationic palladium-catalyzed [5+2] heterocyclization of (aroylmethoxy) arylboronic acids and internal alkynes)

RN 1048361-14-3 CAPLUS

CN Boronic acid, B-[2-[(2-oxocyclohexyl)oxy]phenyl]- (CA INDEX NAME)

REFERENCE COUNT:

46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:658516 CAPLUS Full-text

DOCUMENT NUMBER: 145:262670

TITLE: A boronic-chalcone derivative exhibits potent anticancer activity through inhibition of the

proteasome

AUTHOR(S): Achanta, Geetha; Modzelewska, Aneta; Feng, Li; Khan,

Saeed R.; Huang, Peng

CORPORATE SOURCE: Department of Molecular Pathology, University of Texas

MD Anderson Cancer Center, Houston, TX, USA
SOURCE: Molecular Pharmacology (2006), 70(1), 426-433

CODEN: MOPMA3; ISSN: 0026-895X

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics
DOCUMENT TYPE: Journal

LANGUAGE: English

Chalcones and their derivs. have been shown to have potent anticancer activity. However, the exact mechanisms of cytotoxic activity remain to be established. In this study, we have evaluated a series of boronic chalcones for their anticancer activity and mechanisms of action. Among the eight chalcone derivs. tested, 3,5-bis-(4-boronic acid-benzylidene)-1-methylpiperidin-4-one (AM114) exhibited most potent growth inhibitory activity with IC50 values of 1.5 and 0.6 uM in 3-(4.5-dimethylthiazol-2-vl)-2.5diphenyltetrazolium bromide assay and colony formation assay, resp. The cytotoxic activity of AM114 was shown to be associated with the accumulation of p53 and p21 proteins and induction of apoptosis. Mechanistic studies showed that AM114 treatment inhibited the chymotrypsin-like activity of the 20S proteasome in vitro, leading to a significant accumulation of ubiquitinated p53 and other cellular proteins in whole cells. In vitro studies showed that AM114 did not significantly disrupt the interaction of p53 and murine double minute 2 protein. It is noteworthy that AM114 as a single agent was preferentially toxic to cells with wild-type p53 expression, whereas combination of this compound with ionizing radiation (IR) significantly enhanced the cell-killing activity of IR in both wild-type p53 and p53-null cells. Together, these results indicate that the boronic chalcone derivative AM114 induces significant cytotoxic effect in cancer cells through the inhibition of the cellular proteasome and provide a rationale for the further development of this class of compds. as novel cancer chemotherapeutic agents. 856849-35-9

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(boronic-chalcone derivative exhibits potent anticancer activity through inhibition of proteasome)

RN 856849-35-9 CAPLUS

CN Boronic acid, [(1-methyl-4-oxo-3,5-piperidinediylidene)bis(methylidyne-4,1-phenylene)bis-(9CI) (CA INDEX NAME)

IT 856849-32-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(boronic-chalcone derivative exhibits potent anticancer activity through inhibition of proteasome)

RN 856849-32-6 CAPLUS

CN Boronic acid, [[5-(1,1-dimethylethyl)-2-oxo-1,3cyclohexanediylidene]bis(methylidyne-4,1-phenylene)]bis- (9CI) (CA INDEX NAME)

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 3.0 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN 2006:315088 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 145:290

Anticancer activities of novel chalcone and

TITLE: bis-chalcone derivatives

AUTHOR(S): Modzelewska, Aneta; Pettit, Catherine; Achanta, Geetha: Davidson, Nancy E.: Huang, Peng: Khan, Saeed

CORPORATE SOURCE: Division of Chemical Therapeutics, Sidney Kimmel

Comprehensive Cancer Center at Johns Hopkins,

Baltimore, MD, 21231, USA

SOURCE: Bioorganic & Medicinal Chemistry (2006), 14(10), 3491-3495

CODEN: BMECEP: ISSN: 0968-0896 PUBLISHER: Elsevier B.V.

Journal DOCUMENT TYPE: LANGUAGE: English OTHER SOURCE(S):

CASREACT 145:290

Ι

AB A series of novel chalcones and bis-chalcones containing boronic acid moletices has been synthesized and evaluated for antitumor activity against the human breast cancer MDA-MB-231 (estrogen receptor-neg.) and MCF7 (estrogen receptor-pos.) cell lines and against two normal breast epithelial cell lines, MCF-10A and MCF-12A. These mols. inhibited the growth of the human breast cancer cell lines at low micromolar to nanomolar concns., with five of them showing preferential inhibition of the human breast cancer cell lines. Furthermore, bis-chalcone I exhibited a more potent inhibition of colon cancer cells expressing wild-type p53 than of an isocenic cell line that was p53-null.

IT 856849-32-69 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (anticancer activities of chalcone and bis-chalcone derivs.)

RN 856849-32-6 CAPLUS

CN Boronic acid, [[5-(1,1-dimethylethyl)-2-oxo-1,3cyclohexanediylidene]bis(methylidyne-4,1-phenylene)]bis- (9CI) (CA INDEX NAME)

TT 856849-35-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(anticancer activities of chalcone and bis-chalcone derivs.)

RN 856849-35-9 CAPLUS

CN Boronic acid, [(1-methyl-4-oxo-3,5-piperidinediylidene)bis(methylidyne-4,1-phenylene)|bis-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:612309 CAPLUS Full-text

DOCUMENT NUMBER: 143:91012

TITLE: Boronic acid aryl analogs for the treatment of cancer INVENTOR(S): Khan, Saeed R.

PATENT ASSIGNEE(S): Johns Hopkins University, USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				KIND DATE				APPLICATION NO.						DATE			
WO	2005	0637	74		A1		2005	0714	1	WO 2	004-	JS43	114		21	0041	221	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	TG												
US	2008	0171	723		A1		2008	0717	1	US 2	007-	5967.	51		21	0071	018	
PRIORIT	RIORITY APPLN. INFO.:								US 2003-531765P				1	P 21	20031222			
									1	WO 2	004-1	JS 43	114	1	vi 2	0041	221	

OTHER SOURCE(S): MARPAT 143:91012

3 The invention discloses boronic acid aryl derivs, which are useful as antitumor/anticancer agents. The compds., which are inexpensive to synthesize, exhibit unexpectedly good inhibitors of the growth of human breast cancer cells. The invention also discloses the use of the boronic acid aryl derivs. to treat cancer. The invention also provides pharmaceutical compns. comprising the inhibitors of the invention and methods for using the inhibitors and pharmaceutical compns. in the treatment and prevention of cancer.

- RN 856849-32-6 CAPLUS
- CN Boronic acid, [[5-(1,1-dimethylethyl)-2-oxo-1,3cyclohexanediylidene]bis(methylidyne-4,1-phenylene)]bis- (9CI) (CA INDEX NAME)

- RN 856849-35-9 CAPLUS
- CN Boronic acid, [(1-methyl-4-oxo-3,5-piperidinediylidene)bis(methylidyne-4,1-phenylene)]bis- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

# Proviso Cmpds:

=> d que 126

L1 STR

VAR G1=7/8/9/25/24/23/22/26/28/13/15/16/17

REP G2=(0-6) A

VAR G3=40/38 NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 7 20 13 26 NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE

L2 3407 SEA FILE=REGISTRY SSS FUL L1 L15 STR



Ak @11



Cb@14 Hy@15

HO~~B~~OH

VAR G1=11/12 VAR G2=14/15 VAR G3=17/19/22 REP G4=(0-20) A NODE ATTRIBUTES: CONNECT IS E1 RC AT 11 CONNECT IS E2 RC AT 12 CONNECT IS E1 RC AT 14

DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 14
GGCAT IS UNS AT 15
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 3

NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L18 19 SEA FILE=REGISTRY SUB=L2 SSS FUL L15

L26 21 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L25

=> d 126 ibib abs hitstr tot

L26 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:336377 CAPLUS Full-text

DOCUMENT NUMBER: 150:306630

TITLE: Preparation of xanthenes, thioxanthenes and

benzopyranopyridines, and related analogs as modulators of glucocorticoid receptor, ap-1, and/or

nf-kb activity and use thereof

INVENTOR(S): Weinstein, David S.; Chen, Ping; Dhar, T. G. Murali;

Duan, Jingwu; Gong, Hua; Jiang, Bin; Yang, Bingwei

Vera; Doweyko, Arthur M.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA SOURCE: U.S. Pat. Appl. Publ., 211pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	ENT :				KIN	D	DATE			APPL						ATE		
	2009				A1	-	2009	0319		US 2	007-					0070		
ΑU	2007	2862	21		A1		2008	0221		AU 2	007-	2862	21		2	0070	809	
CA	2660	318			A1		2008	0221		CA 2	007-	2660	318		2	0070	809	
WO	2008	0219	26		A2		2008	0221		WO 2	007-	US75	543		2	0070	809	
WO	2008	0219	26		A3		2008	0522										
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		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	
		KM,	KN,	KΡ,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	
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		IS,	ΙT,	LT,	LU,	LV,	MC,	MΤ,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
								NA,					UG,	ZM,	ZW,	AM,	ΑZ,	
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	R:							DE,										
																	TR,	į
	2009																	
KR	2009	0389	30		A		2009	0421		KR 2	009-	7047	88		2	0090	306	

PRIORITY APPLN, INFO.:

US 2006-836496P P 20060809 US 2007-835438 A 20070808 WO 2007-US75543 W 20070809

G:

AB Novel non-steroidal compds. I [A = 5-8 membered carbocyclic or heterocyclic ring; B = cycloalkyl, cycloalkenyl, aryl, heterocyclo ring, and heteroaryl ring, wherein the B ring is fused to the A ring, and the B ring is optionally substituted with R5-8; X, Y, and Z independently = -A1QA2-; Q independently = bond, O, S, S(O), and S(O)2; A1 and A2 independently = bond, (un)substituted alkylene, alkenylene with provisions; R1-8 independently = H, halo, (un) substituted alkyl, etc.; R9 and R10 independently = H, halo, (un) substituted alkyl, alkenyl, alkynyl, etc.; R11 = H, alkoxy, aryl, (un) substituted alkyl, etc.; R12 = heterocyclo, heteroaryl and CN], and their pharmaceutically acceptable salts are prepared and disclosed as useful in treating diseases associated with modulation of the glucocorticoid receptor. AP-1, and/or NF-KB activity, including inflammatory and immune diseases. Thus, e.g., II was prepared by amidation of xanthen-9-vlacetic acid (preparation given) with 2-amino-5-(4-pyridin-4-ylbenzyl)thiazole (preparation given). Assays for determining ap-1 activity are described, e.g., II demonstrated an IC50 value of 156.9 nM. Also provided are pharmaceutical compns. and methods of treating inflammatory- or immune-associated diseases and obesity and diabetes employing said compds. 481725-35-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of xanthenes and thioxanthenes and related analogs as modulators of glucocorticoid receptor, ap-1, and/or nf-kb activity and use thereof)

RN 481725-35-3 CAPLUS

CN Boronic acid, B-(4-acetyl-3-fluorophenyl)- (CA INDEX NAME)

L26 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:292480 CAPLUS Full-text

DOCUMENT NUMBER: 150:306765

TITLE: Method for the organocatalytic activation of carboxylic acids for chemical reactions using

ortho-substituted arylboronic acids

INVENTOR(S): Hall, Dennis; Marion, Olivier; Al-Zoubi, Raed
PATENT ASSIGNEE(S): The Governors of the University of Alberta, Can.

SOURCE: PCT Int. Appl., 34pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PI	PATENT NO.				KIN	ND DATE				APPLICATION NO.					DATE		
WC	2009	0300	22		A1	_	2009	0312		WO 2	008-	CA15	 54		2	0080	905
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
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		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
		AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM							
PRIORIT	PRIORITY APPLN. INFO.:			US 200					007-970083P P 20070905					905			
OTHER SOURCE(S):				CAS	SREACT 150:306765; MARPAT 150:306765												

AB The present disclosure describes operationally simple methods for the low temperature, catalytic activation of carboxylic acids for organic reactions,

in particular for direct amidation reactions with amines. The methods involve the use of ortho-substituted arylboronic acids I (Rl = halo, Cl-4 alkyl, C6-10 aryl, NO2, CN, CO2H, C(0)Cl-4-alkyl, C02Cl-4-alkyl, CCl-4-alkyl, SCl-4-alkyl, C6-10-aryl, S(0)Cl-4-alkyl, SO2Cl-4-alkyl, C6-10-aryl, S(0)Cl-4-alkyl, C6-10-aryl, CO2H, C(0)Cl-4-alkyl, CO2Cl-4-alkyl, CCl-4-alkyl, Cl-4-alkyl, C6-10-aryl, S(0)Cl-4-alkyl, SO2Cl-4-alkyl, CCl-4-alkyl, CCl-4-alky

T 1126895-86-0

RL: CAT (Catalyst use); USES (Uses)

(method for organocatalytic activation of carboxylic acids for chemical reactions using ortho-substituted arylboronic acids catalysts)

RN 1126895-86-0 CAPLUS

CN Boronic acid, B-(4-acetyl-2-nitrophenyl)- (CA INDEX NAME)

REFERENCE COUNT:

PUBLISHER:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:68149 CAPLUS Full-text

DOCUMENT NUMBER: 150:214432

TITLE: On the organizing role of water molecules in the assembly of boronic acids and 4,4'-bipyridine: 1D, 2D

and 3D hydrogen-bonded architectures containing

cyclophane-type motifs
AUTHOR(S): Rodriguez-Cuamatzi, Patricia; Luna-Garcia, Rolando;

Torres-Huerta, Aaron; Bernal-Uruchurtu, Margarita I.;

Barba, Victor; Hopfl, Herbert

CORPORATE SOURCE: Universidad Politecnica de Tlaxcala, Tlaxcala, Mex.

SOURCE: Crystal Growth & Design (2009), 9(3), 1575-1583

CODEN: CGDEFU; ISSN: 1528-7483

American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Boric acid H3B03 (ba), mono- and diboronic acids 1,4-[(H0)2B]2C6H4 (1,4-bdba), 1,3-[(H0)2B]2C6H4 (1,3-bdba), 4-(H0)2BC6H4C0Me (4-acpba), 3-(H0)2BC6H3NH2 (3-ampba) form hydrogen-bonded supramol. structures with 4,4'-bipyridine (bpy) and water in solid state. 4,4'-Bipyridine gave 1:1 adducts with H3B03 and 1:2 adducts with arylboronic acids, which have been characterized by x-ray diffraction anal. The supramol. solid-state structures are composed of hydrogen-bonded networks with (B)O-H···N, (B)O-H···O,

C-H...O, C-H...N,

 $C-H\cdots\pi$ ,  $\pi\cdots\pi$  and

C-H·mB interactions. The comparative anal. of the boric/boronic acid-4,4'-bipyridine adducts has revealed that water mols. play an important role as spacer mols. in RB(GH)2"-py synthons, since their incorporation in the hydrogen-bonding patterns allows optimization of  $\pi-\pi$  interactions. The

10/596,751

June 2, 2009

structural relationship between the dihydroxyboryl and the carboxyl group has been analyzed, showing that the former can form at least three different hydrogen-bonding patterns with pyridines. This can be attributed to the presence of two acidic hydrogen atoms in boronate group B(OH)2 instead of one in carboxy group CO2H. The three motifs have been examined also by ab initio calcns., confirming that for the three cases the (B)O-H···N interaction energies are similar.

1113055-49-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and structure of hydrogen-bonded supramol. assemblies of boric,

arylboronic and aryldiboronic acids with 4,4'-bipyridine and water) RM

1113055-49-4 CAPLUS CN Boronic acid, B-(4-acetylphenyl)-, compd. with 4,4'-bipyridine, hydrate (1:2:1) (CA INDEX NAME)

CM 1

CRN 149104-90-5 CMF C8 H9 B O3

CM 2

CRN 553-26-4 CMF C10 H8 N2



REFERENCE COUNT:

182 THERE ARE 182 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

L26 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN 2008:1001043 CAPLUS Full-text 149:524758

> Synthesis, biological evaluation, and molecular modeling studies of methylene imidazole substituted biarvls as inhibitors of human

17α-hydroxylase-17,20-lyase (CYP17)-Part II:

Core rigidification and influence of substituents at

the methylene bridge

Hu, Oingzhong; Negri, Matthias; Jahn-Hoffmann, AUTHOR(S):

Kerstin; Zhuang, Yan; Olgen, Sureyya; Bartels, Marc; Mueller-Vieira, Ursula; Lauterbach, Thomas; Hartmann,

Rolf W.

Pharmaceutical and Medicinal Chemistry, Saarland CORPORATE SOURCE:

University, Saarbruecken, D-66041, Germany Bioorganic & Medicinal Chemistry (2008), 16(16),

7715-7727

CODEN: BMECEP: ISSN: 0968-0896

Elsevier Ltd. PUBLISHER: DOCUMENT TYPE: Journal

SOURCE:

LANGUAGE · English OTHER SOURCE(S): CASREACT 149:524758

Thirty-five novel substituted imidazolyl methylene biphenyls have been synthesized as CYP17 inhibitors for the potential treatment of prostate cancer. Their activities have been tested with recombinant human CYP17 expressed in Escherichia coli. Promising compds. were tested for selectivity against CYP11B1, CYP11B2, and hepatic CYP enzymes 3A4, 1A2, 2B6 and 2D6. The core rigidified compds. (30-35) were the most active ones, being much more potent than Ketoconazole and reaching the activity of Abiraterone. However, they were not very selective. Another rather potent and more selective inhibitor (compound 23, IC50 = 345 nM) was further examined in rats regarding plasma testosterone levels and pharmacokinetic properties. Compared to the reference Abiraterone, 23 was more active in vivo, showed a longer plasma half-life (10 h) and a higher bioavailability. Using our CYP17 homol. protein model, docking studies with selected compds. were performed to study possible interactions between inhibitors and amino acid residues of the active site.

186498-36-2

RL: RCT (Reactant); RACT (Reactant or reagent) (imidazolyl methylene biphenyls preparation as inhibitors of CYP17)

RN 186498-36-2 CAPLUS

Boronic acid, B-[4-(1-oxopropvl)phenvl]- (CA INDEX NAME) CN



REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:640763 CAPLUS Full-text

DOCUMENT NUMBER: 149:10119

TITLE: Preparation of arylboronates as inhibitors of fatty

acid amide hydrolase

INVENTOR(S):

Adams, Julian; Behnke, Mark L.; Castro, Alfredo C.; Evans, Catherine A.; Grenier, Louis; Grogan, Michael

J.; Liu, Tao; Snyder, Daniel A.; Tibbitts, Thomas T. Infinity Discovery, Inc., USA

PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 256pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----WO 2008063300 A2 20080529 WO 2007-US21626 WO 2008063300 A3 20080717 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA US 20090099131 A1 20090416 US 2007-870130 US 2006-850520P P 20061010 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 149:10119 AB Z1Z2BL1A[(R1)n]XA1(R2)m [Z1 = OR; Z2

Z1Z2BLIA[(R1)n]XA1(R2)m [Z1 = OR; Z2 = OR, (substituted) aliphatyl, anyl, heteroalryl; Z1Z2 = atoms to form a 5-8 membered ring containing  $\ge 1$  O directly attached to B; L1 = bond, (substituted) alkylene, alkenylene; A = substituted saturated, partly unsatd. or aromatic (heteroatom-containing) mono-, bi-, or tricyclic ring system containing  $\ge 1$  F; X = bond, hydrocarbylene optionally interrupted by O, N:N, S, CO, SO, SO2, phenylene, etc.; Al = (substituted) saturated, partly unsatd. or aromatic (heteroatom-containing) mono-, bi-, or tricyclic ring system; m, n = 0-10; R1, R2 = halo, OR, CF3, cyano, NO2, isocyano, SO2R, SOR, CO2R, CO2R, CHO, N3, B(OH)2, (substituted) aliphatyl, aryl, etc.; R = H, (substituted) aliphatyl, heteroaryl; with a provisol, were prepared as inhibitors of FAAH useful for treatment of pain and inflammation (no data). Thus, title compound 3, 4'-difluorobliphen-4-ylboronic acid was prepared in 3 steps from 1, 4-dibromo-2-fluorobenzene boronic acid.

IT 1029438-14-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of arylboronates as inhibitors of fatty acid amide hydrolase)  ${\tt RN} = 1029438{-}14{-}9$  CAPLUS

CN Boronic acid, B-(4'-acetyl[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

$${\rm H}\circ -{\rm B}_{\rm OH} \qquad {\rm A}\circ$$

L26 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:530123 CAPLUS Full-text

DOCUMENT NUMBER: 148:517720

TITLE: Preparation of substituted

imidazolyl[(fluoropyridinyl)phenyl]ethanols and
analogs as bombesin receptor subtype-3 modulators
Chen, David; Franklin, Christopher L.; Guzzo, Peter

R.; Lin, Linus S.; Lo, Michael M.-C.; Nargund, Ravi P.; Sebhat, Iyassu K.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 165pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

INVENTOR(S):

GI

AB

PA	PATENT NO.				KIND DATE			APPLICATION NO.							DATE		
	2008						2008		WO 2	007-	US22	087			0071		
WO									D.2	D.D.	D.C.	DII	DD.	DIA	DV	DE	0.3
	W :						AU,										
							CZ,										
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
		KM,	KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES.	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA					
AU 2007309570 A1				2008	0502		AU 2	007-	3095	70		2	0071	016			
PRIORITY APPLN. INFO.:							US 2	006-	8531	93P		P 2	0061	020			
											007-						
OTHER S	OURCE	(S):			MAR	PAT	148:	5177:	20								

Title compds. I [ring A = (un)substituted aryl or heteroaryl; ring B = mono or bicyclic ring selected from (un)substituted cycloalkyl, cycloalkenyl,

10/596,751

June 2, 2009

heterocycloalkyl, heterocycloalkenyl, aryl, or heteroaryl; X = H, halo, SH, CF3, (un)substituted alkyl, alkenyl, (CH2)naryl, (CH2)nheteroaryl, etc.; Y = halo, OCF3, CN, SH, etc.; R1 and R2 independently = H, (un)substituted (CH2) nhalo, (CH2) nCN, (CH2) nCCl3, (CH2) ncycloalkyl, (CH2) naryl, etc., with provisions that R1 and R2 are not both H; R3 = H, alkyl, or C(O)alkyl; R4 and R5 independently = H, OH, CN, CF3, halo, (un)substituted alkyl, aryl, etc.; n = 0 to 4], and their pharmaceutically acceptable salts, are prepared and disclosed as bombesin receptor subtype-3 (BRS-3) modulators. Thus, II was prepared by coupling of intermediate 2-(4-bromophenyl)-3-[4-(2.2dimethylpropyl)-1-trityl-1H- imidazol-2-vl]-1,1,1-trifluoropropan-2-ol (available from 2-(2,2-dimethylpropyl)-2-methyl-1-trityl-1H-imidazole and 4bromoacetophenone) with bis(pinacolato)diboron followed by Suzuki coupling with 2-bromo-5-fluoropyridine and deprotection. I were evaluated in bombesin receptor subtype-3 binding assays, e.g., II demonstrated an IC50 value of 18 nM.

1022154-78-4P

RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted imidazolvl[(fluoropyridinvl)phenvl]ethanols and analogs as bombesin receptor subtype-3 modulators)

1022154-78-4 CAPLUS RN

CN INDEX NAME NOT YET ASSIGNED

L26 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:224089 CAPLUS Full-text

DOCUMENT NUMBER: 148:285174

TITLE: Preparation of xanthenes, thioxanthenes and

benzopyranopyridines, and related analogs as

modulators of glucocorticoid receptor, ap-1, and/or nf-kb activity and use thereof

APPLICATION NO.

DATE

INVENTOR(S):

Weinstein, David S.; Gong, Hua; Duan, Jingwu; Dhar, T.g. Murali; Yang, Bingwei Vera; Chen, Ping; Jiang,

Bin

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

KIND DATE

SOURCE: PCT Int. Appl., 349 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION: PATENT NO.

> \_\_\_\_\_ WO 2008021926 A2 20080221 WO 2007-US75543 20070809 WO 2008021926 A3 20080522 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,

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MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
            PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
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        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
            GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
    US 20090075995
                         A1
                               20090319
                                          US 2007-835438
                                                                  20070808
    AU 2007286221
                                           AU 2007-286221
                         A1
                               20080221
                                                                  20070809
    CA 2660318
                         A1
                               20080221
                                           CA 2007-2660318
                                                                  20070809
    EP 2049507
                                          EP 2007-800057
                         A2
                               20090422
                                                                  20070809
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                                           IN 2009-DN677
    IN 2009DN00677
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                               20090515
    NO 2009000564
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                               20090319
                                           NO 2009-564
                                                                  20090205
    KR 2009038930
                         Α
                               20090421
                                           KR 2009-704788
                                                                  20090306
                                           US 2006-836496P
PRIORITY APPLN. INFO.:
                                                               P 20060809
                                           US 2007-835438
                                                               A 20070808
                                           WO 2007-US75543
                                                              W 20070809
OTHER SOURCE(S):
                       MARPAT 148:285174
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AB Novel non-steroidal compds. I [A = 5-8 membered carbocyclic or heterocyclic ring, B = cycloalkyl, cycloalkenyl, aryl, heterocyclo ring, and heteroaryl ring, wherein the B ring is fused to the A ring, and the B ring is optionally substituted with R5-6; X, Y, and Z independently = -AlQA2-; Q independently = bond, O, S, S(O), and S(O)2; Al and A2 independently = bond, (un) substituted alkyl, etc.; R9 and R10 independently = H, halo, (un) substituted alkyl, etc.; R9 and R10 independently = H, halo, (un) substituted alkyl, alkenyl, alkenyl, etc.; R11 = H, alkoxy, aryl, (un) substituted alkyl, etc.; R12 = heterocyclo, heteroaryl and CN1, and their pharmaceutically acceptable salts are prepared and disclosed as useful in treating diseases associated with modulation of the glucocorticoid receptor, AP-1, and/or NF-KB activity, including inflammatory and immune diseases.

Thus, e.g., II was prepared by amidation of xanthen-9-ylacetic acid (preparation given) with 2-amino-5-(4-pyridin-4-ylbenzyl) thiazole (preparation

given). Assays for determining ap-1 activity are described, e.g., II demonstrated an ICSO value of 156.9 mM. Also provided are pharmaceutical compns. and methods of treating inflammatory- or immune-associated diseases and obesity and diabetes employing said compds.

IT 481725-35-3

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of xanthenes and thioxanthenes and related analogs as modulators of glucocorticoid receptor, ap-1, and/or nf-kb activity and use thereof)

RN 481725-35-3 CAPLUS

CN Boronic acid, B-(4-acetyl-3-fluorophenyl)- (CA INDEX NAME)

L26 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1050776 CAPLUS Full-text

DOCUMENT NUMBER: 147:534020

TITLE: Thiophene substituted acylguanidines as BACE1

inhibitors

AUTHOR(S): Fobare, William F.; Solvibile, William R.; Robichaud,

Albert J.; Malamas, Michael S.; Manas, Eric; Turner,

Jim; Hu, Yun; Wagner, Erik; Chopra, Rajiv; Cowling,

Rebecca; Jin, Guixan; Bard, Jonathan
CORPORATE SOURCE: Chemical and Screening Sciences, CN80

Chemical and Screening Sciences, CN8000, Wyeth Research, Princeton, NJ, 08543-8000, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(19), 5353-5356

CODEN: BMCLE8: ISSN: 0960-894X

Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:534020

GI

PUBLISHER:

Thiopheneacetyl quanidines such as I are prepared as selective  $\beta$ -secretase ( $\beta$ -AB site amyloid precursor protein cleavage enzyme, BACE1) inhibitors for potential use as anti-Alzheimer's agents; the synthesis of the thiophenacetyl quanidines uses regioselective Suzuki coupling reactions of a dibromothiopheneacetate with arylboronic acids as the key steps. The use of a thiophene as the core heterocycle rather than the pyrrole of the initial lead compound allows greater structural variation in the tested compds. (because of the improved stability of dibromothiophenes over the corresponding 2.5dibromopyrroles) and thus accelerates the acquisition of information on the binding of related compds. to BACE1. The structures of the lead compound and of one of the thiopheneacetyl guanidines bound to BACE1 are determined by Xray crystallog, and used in the design of analogs. E.g., I (prepared in nine steps from 2,3,5-tribromo-4-methylthiophene, 2-chlorophenylboronic acid, 4propoxyphenylboronic acid, and 3-aminopropanol) binds to BACE1 with an IC50 value of 150 nM; with 7-fold and 23-fold selectivities for BACE1 over BACE2 and cathepsin D, and with 16% inhibition of pepsin at a concentration of 100 uM.

956894-00-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of diarylthiopheneacetyl quanidines as selective BACE1 inhibitors using the regioselective Suzuki coupling reactions of a dibromothiopheneacetate with arvlboronic acids as key steps)

RN 956894-00-1 CAPLUS

CN Boronic acid, B-[4-(4-acetylphenoxy)phenyl]- (CA INDEX NAME)

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 14 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN 2007:873604 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 147:257778

TITLE: Preparation of 1,2,5-thiadiazolidin-3-one 1,1-dioxides

and related compounds containing imidazole moiety as PTPase (protein tyrosine phosphatase) inhibitors

Mjalli, Adnan M. M.; Polisetti, Dharma R.; Quada, INVENTOR(S): James C.; Yarraqunta, Ravindra R.; Andrews, Robert C.;

Xie, Rongyuan; Subramanian, Govindan

APPLICATION NO

DATE

PATENT ASSIGNEE(S): Transtech Pharma, Inc., USA

SOURCE: PCT Int. Appl., 192pp.

> KIND DATE

CODEN: PIXXD2 DOCUMENT TYPE: Patent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DATENT NO

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WO	2007	0898	57		A2		2007	0809	1	WO 2	2007-	US26	75		2	0070	130
WO	2007	0898	57		A3		2008	0626									
	W.	AE.	AG.	AL.	AM.	AT.	AII.	AZ.	BA.	BB.	BG.	BR.	BW.	BY.	BZ.	CA.	CH.

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
             KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     AU 2007211319
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                          A1
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                                           US 2007-699780
                         A1
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     EP 1991544
                                20081119
                                           EP 2007-763040
                         A2
                                                                   20070130
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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             BA, HR, MK, RS
     MX 2008008929
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                                            MX 2008-8929
                                                                   20080710
     IN 2008DN06050
                         Α
                                20081024
                                            IN 2008-DN6050
                                                                   20080710
     CN 101374835
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                                20090225
                                            CN 2007-80003942
                                                                   20080730
     KR 2008094806
                        A
                                20081024
                                            KR 2008-721180
                                                                   20080829
                                            KR 2008-721180 20080829
US 2006-763256P P 20060130
WO 2007-US2675 W 20070130
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 147:257778
```

GI

Title compds. I-IV [Ar1, Ar2, Ar4, and Ar5 = Ph, indanyl, tetrahydronaphthyl, AB etc.; Ar3 = Ph, naphthalene, indanyl, etc.; V is C, W is C, X is N, Y is C, Z is N, when sides b, c and e are single bonds, and sides a and d are double bonds; or V is C, W is N, X is C, Y is N, Z is C, when sides a, c and d are single bonds, and sides b and e are double bonds; or V is C, W is N, X is C, Y is C, Z is N, when sides a, b and d are single bonds, and sides c and e are double bonds; L1 = -T1-L3-T2-; L3 = direct bond, alkylene, alkenylene, etc.; T1, T2 = direct bond, -CH2-, -O-, etc.; L2 = -C.tplbond.C-, -CO-, -O-, etc.; L4 = direct bond or -CH2-; R1-R5 = H or Rb; R6 = H or Rb; R11 = Rb; G = O1, etc.; D is CR7R8, and E is CR7 or N, when side f is a double bond; or D is CR7, and E is C, when side f is a double bond; R7, R8 = halo, hydroxy, amino, etc.; M = H or a counter ion selected from Na+, K+ and other pharmaceutically acceptable counter ions; Rb = cycloalkyl, cyano, NO2, etc.; q = 1, 2; s = 0-3] or their pharmaceutically acceptable salts were prepared Thus, a multistep synthesis of compound V from 4-bromophenylacetic acid was given. In PTP-1B inhibition assays, 195 examples of compds. I exhibited IC50 values of less than 10 µM. Compds. I-IV are claimed useful for the treatment of diabetes, immune dysfunction, etc.

186498-36-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 1,2,5-thiadiazolidin-3-one 1,1-dioxides and related compds. containing imidazole moiety as PTPase inhibitors)

RN 186498-36-2 CAPLUS

CN Boronic acid, B-[4-(1-oxopropyl)phenyl]- (CA INDEX NAME)

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*



DOCUMENT NUMBER: TITLE:

INVENTOR(S):

L26 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:763312 CAPLUS Full-text

147:166577

Preparation of boron-containing small molecules and nucleosides for treating fungal infections Baker, Stephen J.; Akama, Tsutomu; Allev, Michael Richard Kevin; Benkovic, Stephen J.; Dipierro, Michael; Hernandez, Vincent S.; Hold, Karin M.;

Kennedy, Isaac; Likhotvorik, Igor; Mao, Weimin; Maples, Kirk R.; Plattner, Jacob J.; Rock, Fernando; Sanders, Virginia; Stemphoski, Aaron M.; Yiannikouros, George Petros; Zegar, Siead; Zhang, Yong-Kang; Zhou,

Huchen

Patent

English

CODEN: PIXXD2

PATENT ASSIGNEE(S): Anacor Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 380pp.

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.				KIND				ATE APPLICATION NO.									
WO	2007	0783	40		A2		2007			WO 2	006-1	JS32:	238		2	0060	816
WO	2007	0783	40		A3		2009	0430									
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WO	2006	0890	67		A2		2006	0824		WO 2	006-1	JS55	42		2	0060	216
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		VN,	YU,	ZA,	ZM,	ZW											
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             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
    US 20060234981
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                                         US 2006-357687
                                                                  20060216
     AU 2006333527
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                                          AU 2006-333527
                                                                  20060816
                         A1
     CA 2635680
                         A1
                               20070712 CA 2006-2635680
20081008 EP 2006-801794
                                                                  20060816
     EP 1976536
                              20081008
                         A2
                                                                  20060816
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                                           MX 2008-8417
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                        A 20081010
A 20081222
     IN 2008MN01514
                                           IN 2008-MN1514
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     KR 2008110984
                                           KR 2008-718808
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                                                              P 20051230
PRIORITY APPLN. INFO.:
                                           US 2005-755227P
                                           US 2006-357687 A 20060216
                                           WO 2006-US5542
                                                              A 20060216
                                           US 2006-746361P
                                                              P 20060503
                                           US 2005-654060P P 20050216
WO 2006-US32238 W 20060816
OTHER SOURCE(S):
                       MARPAT 147:166577
GT
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Boron-containing small mols, and nucleosides I were prepared, wherein R1 and AB R2 are members independently selected from H, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl; wherein R1 and R2, together with the atoms to which they are attached, can be optionally joined to form a 4- to 7membered ring; Z1 is CHO, substituted alkyl; A, D, E, and G are independently N, and CR, wherein R is OH, NH2, SH, alkoxy, aminoalkyl, substituted sulfonyl, substituted sulfoxy, substituted sulfonamide; two adjacent R groups form heterocylce; combination of nitrogens (A + D + E + G) is an integer selected from 0 to 3. This invention relates to compds. useful for treating fungal infections, more specifically topical treatment of onychomycosis and/or cutaneous fungal infections, wherein said infection is a member selected from chloronychia, paronychias, erysipeloid, onychorrhexis, gonorrhea, swimmingpool granuloma, larva migrans, leprosy, milkers' nodules, acute bacterial perionvxis, chronic perionvxis, sporotrichosis, svphilis, tuberculosis verrucosa cutis, tularemia, tungiasis, peri- and subungual warts, zona, nail dystrophy (trachyonychia), dermatol, diseases, psoriasis, pustular psoriasis, alopecia aerata, parakeratosis pustulosa, contact dermatosis, Reiter's syndrome, psoriasiform acral dermatitis, lichen planus, idiopathy atrophy in the nails, lichin nitidus, lichen striatus, inflammatory linear verrucous epidermal naevus, alopecia, pemphigus, bullous pemnphigoid, acquired epidermolysis bullosa, Darier's disease, pityriasis rubra pilaris, palmoplantar keratoderma, contact eczema, polymorphic erythema, scabies, Bazex syndrome, systemic scleroderma, systemic lupus erythematosus, chronic lupus erythematosus, dermatomyositus, Sporotrichosis, Mycotic keratitis, Extension oculomycosis, Endogenous oculomycosis, Lobomycosis, Mycetoma, Piedra, Pityriasis versicolor, Tinea corporis, Tinea cruris, Tinea pedis, Tinea barbae, Tinea capitis, Tinea nigra, Otomycosis, Tinea favosa, Chromomycosis, and Tinea Imbricata. This invention is directed to compds. that are active

against fungi and have properties that allow the compound, when placed in contact with a patient, to reach the particular part of the skin, nail, hair, claw or hoof infected by the fungus. In particular the present compds. have physiochem. properties that facilitate penetration of the nail plate. Thus,  $1,3-{\rm dihydro}-5-{\rm fluorol-l-hydroxy-2},1-bensoxaborole was prepared and tested as antifungal agent and had MIC values ranging from 0.25 - 2 <math display="inline">\mu {\rm g/mL}$  against all fungi tested.

1,3-Dihlydro-5-fluoro-1-hydroxy-2,1-benzoxaborole had fungicidal activity against Trichophyton rubrum and Trichophyton mentagrophytes with MFC values of 8 and 16 ug/mL, resp.

IT 943311-80-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of boroncontaining small mols. and nucleosides for treating fungal infections)  $\,$ 

943311-80-6 CAPLUS

CN Boronic acid, B-[4-[4-(1-oxopentyl)phenoxy]-2-[[(tetrahydro-2H-pyran-2yl)oxy]methyl]phenyl]- (CA INDEX NAME)

L26 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:733844 CAPLUS Full-text

DOCUMENT NUMBER:

147:158454

TITLE:

RN

Boron-containing small molecules which inhibit  ${\tt tRNA}$  synthetase editing, their synthesis and use as

antimicrobials

INVENTOR(S):

Baker, Stephen J.; Akama, Tsutomu; Alley, Michael Richard Kevin; Benkovic, Steven J.; Dipierro, Michael; Hernandez, Vincent S.; Hold, Karin M.; Kennedy, Isaac; Likhotvorik, Igor; Mao, Weimin; Maples, Kirk R.; Plattner, Jacob J.; Rock, Fernando; Sanders, Virginia; Stemphoski, Aaron M.; Yiannikouros, George Petros;

Zegar, Siead; Zhang, Yong-Kang; Zhou, Huchen

PATENT ASSIGNEE(S): Anacor Pharmaceuticals, USA

SOURCE: U.S. Pat. Appl. Publ., 265pp., Cont.-in-part of U.S.

Ser. No. 357,687. CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

P	ATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-					
U	S 20070155699	A1	20070705	US 2006-505591	20060816
W	0 2006089067	A2	20060824	WO 2006-US5542	20060216
W	O 2006089067	A3	20070719		

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            KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
            SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
            VN, YU, ZA, ZM, ZW
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            CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
    US 20060234981
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PRIORITY APPLN. INFO.:
                                           US 2005-755227P
                                                               P 20051230
                                           US 2006-357687
                                                              A2 20060216
                                           WO 2006-US5542
                                                              A 20060216
                                           US 2006-746361P
                                                              P 20060503
                                                              P 20050216
                                           US 2005-654060P
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OTHER SOURCE(S): MARPAT 147:158454

Born-containing small mols. Which inhibit the editing activity of tRNA synthetases and which kill or inhibit growth of microorganisms are disclosed. Methods for their synthesis are also disclosed. This invention relates more specifically to compds. useful for treating fungal infections, especially topical treatment of onychomycosis and/or cutameous fungal infections. This invention is directed to compds. that are active against fungi and have properties that allow the compound, when placed in contact with a patient, to reach the particular part of the skin, nail, hair, claw or hoof infected by the fungus. In particular the present compds. have physiochem. properties that facilitate penetration of the nail plate. The borno-containing small mols, include acyclic and cyclic boronic esters which can react with the 2' and/or 3'-hydroxyl of mucleosides.

IT 943311-80-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(boron-containing small mols. which inhibit tRNA synthetase editing, their synthesis and use as antimicrobials)

RN 943311-80-6 CAPLUS

CN Boronic acid, B-[4-[4-(1-oxopenty1)phenoxy]-2-[[(tetrahydro-2H-pyran-2-y1)oxy]methyl]phenyl]- (CA INDEX NAME)

$$\bigcap_{HO-B-} C-CH_2 - CH_2 - C$$

L26 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:1093706 CAPLUS Full-text

DOCUMENT NUMBER: 145:438526

TITLE: Preparation of chromen-4-ones and their analogs as DNA-PK inhibitors

INVENTOR(S): Smith, Graeme Cameron Murray; Martin, Niall Morrison

Barr; Cockcroft, Xiao-Ling Fan; Menear, Keith Allan; Hummersone, Marc Geoffrey; Griffin, Roger John; Frigerio, Mark; Golding, Bernard Thomas; Hardcastle, Ian Robert; Newell, David Richard; Calvert, Hilary Alan; Curtin, Nicola Jane; Desage-El Murr, Marine Kudos Pharmaceuticals Limited, UK; Cancer Research Technology Limited

PATENT ASSIGNEE(S):

PCT Int. Appl., 84pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

Patent English

KIND DATE APPLICATION NO. DATE PATENT NO. WO 2006109084 A1 20061019 WO 2006-GB1379 20060413 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM US 20060264427 20061123 A1 US 2006-403606 20060413 US 20060264623 A1 20061123 US 2006-403763 20060413 EP 1869040 20071226 EP 2006-726777 A1 20060413 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR JP 2008535903 T 20080904 JP 2008-505966 20060413 CN 101268072 20080917 CN 2006-80012557 20071015 A PRIORITY APPLN. INFO.: US 2005-671830P P 20050415 P 20050415 US 2005-671886P A 20050418 GB 2005-7831 US 2005-696064P P 20050701 US 2005-718904P P 20050920 WO 2006-GB1379 W 20060413 OTHER SOURCE(S): MARPAT 145:438526

- AB Title compds. represented by the formula I [wherein A, B and D are repp. selected from the group consisting of: (i) CH, NH, C; (ii) CH, N, N; and (iii) CH, O, C; the dotted lines represent two double bonds in the appropriate locations; and 22-26 together with the carbon atom to which they are bound, form an aromatic ring; and their isomers, salts, solvates, chemical protected forms and prodrugs thereof] were prepared as DNA-PK (DNA-dependent protein kinase) inhibitors. For example, Suzuki-coupling reaction of 5-loodbiphenyl-2-ol with 2-morpholin-4-yl-8-(4,4,5,5-tetramethyl-[1,3,2]dioxaborolan-2-yl)chromen-4- one (preparation given) provide II in 83 yield. I showed activity in DNA-PK inhibition with IC50 values of less than about 500 nM. Thus, I and their pharmaceutical compns. are useful for the treatment of disease ameliorated by the inhibition of DNA-PK.
  - IT 912844-89-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of chromen-4-ones and their analogs as DNA-PK inhibitors)

- RN 912844-89-4 CAPLUS
- CN Boronic acid, B-[2-(4-acetylphenyl)-4-pyridinyl]- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:821376 CAPLUS Full-text

DOCUMENT NUMBER: 145:249085

TITLE: Preparation of azolvlacvlquanidines as

β-secretase inhibitors

INVENTOR(S): Cole, Derek Cecil; Manas, Eric Steven; Jennings, Lee
Dalton; Lovering, Frank Eldridge; Stock, Joseph

Raymond; Moore, William Jay; Ellingboe, John Watson; Condon, Jeffrey Scott; Sukhdeo, Mohani Nirmala; Zhou,

APPLICATION NO.

DATE

Ping; Wu, Junjun; Morris, Koi Michele
IGNEE(S): Wyeth, John, and Brother Ltd., USA

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., SOURCE: U.S. Pat. Appl. Publ., 58pp.

CODEN: USXXCO

KIND DATE

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

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US	2006	0183	790		A1		2006	0817		US 2	006-	3528	20		2	0060	213
US	7488	832			В2		2009	0210									
AU	2006	2146	27		A1		2006	0824		AU 2	006-	2146	27		2	0060	206
CA	. 2597	594			A1		2006	0824		CA 2	006-	2597.	594		2	0060	206
WO	2006	0887	11		A1		2006	0824		WO 2	006-	US44	71		2	0060	206
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PRIORITY APPLN. INFO.:
                                           US 2005-652696P
                                                               P 20050214
                                           WO 2006-US4471
                                                               W 20060206
                                           US 2006-352820
                                                               A3 20060213
                       CASREACT 145:249085; MARPAT 145:249085
OTHER SOURCE(S):
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N NH2
R1 Z-R2

GI

AB The title compds. I [X = N, CR5; Y = N, CR6; Z = CO, (CH2)n; n = 0-3; R = H, alkyl, aryl; R1, R2 = cycloalkyl, cycloheteroalkyl, aryl or heteroaryl; R3, R4 = H, alkyl, alkoxy, etc.; or NR3R4 = 5-7 membered ring optionally containing an addnl. heteroatom selected from O, N or S; R5, R6 = halo, alkyl, haloalkyl, alkoxy, haloalkoxyl, useful for inhibiting  $\beta$ -secretase (BACE) and treating  $\beta$ -amyloid deposits and neurofibrillary tangles, were prepared E.g., a 2-step synthesis of N-(dlaminomethylene)-2, 4-diphenyl-1H-pyrrole-1-actamide (III), starting from 1, 4-diphenylbutane-1, 4-dione and glycine, was given. Exemplified compds. I were tested for BACE-1 binding affinity (data given for representative compds. I). The pharmaceutical composition comprising the compound I is disclosed.

ΙI

IT 186498-36-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of azolylacylguanidines as beta-secretase inhibitors)

RN 186498-36-2 CAPLUS

CN Boronic acid, B-[4-(1-oxopropyl)phenyl]- (CA INDEX NAME)



L26 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:663277 CAPLUS Full-text

DOCUMENT NUMBER: 146:461902

TITLE: Preparation of 4-(2-bromoacety1)-3-fluorophenylboronic

acid

AUTHOR(S): Jiang, Hui; Liu, Zaoxia; Zhang, Yongfei

CORPORATE SOURCE: Zhejiang Apeloa Kangyu Pharmaceutical Co., Ltd.,

Dongyang, Zhejiang Province, 322118, Peop. Rep. China

SOURCE: Zhongguo Yiyao Gongye Zazhi (2005), 36(9), 533-534

CODEN: ZYGZEA; ISSN: 1001-8255

PUBLISHER: Zhongguo Yiyao Gongye Zazhi Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 146:461902

AB  $4-(2-{\rm Bromoacety1})-3-{\rm fluorophenylboronic}$  acid was synthesized from  $4-{\rm bromo}-2-{\rm fluorobenzonitrile}$  by Grignard reaction, protection of carbonyl with

ethanediol, Grignard reaction again and substitution by boron group to give 4-acetyl-3-fluorophenylboric acid followed by bromination with an overall yield of 54%.

481725-35-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 4-(2-bromoacetyl)-3-fluorophenylboronic acid)

RN 481725-35-3 CAPLUS

CN Boronic acid, B-(4-acetyl-3-fluorophenyl)- (CA INDEX NAME)

L26 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:557965 CAPLUS Fuli-text

ACCESSION NUMBER: 2006:557965 CAPLUS Full-text
DOCUMENT NUMBER: 145:230667

TITLE: Effect of Para-Substituents and Solvent Polarity on

the Formation of Triphenylboroxine Amine

Adducts

AUTHOR(S): Kua, Jeremy; Fletcher, Matthew N.; Iovine, Peter M.
CORPORATE SOURCE: Department of Chemistry, University of San Diego, San

Department of Chemistry, University of San Diego, Sa Diego, CA, 92110, USA

SOURCE: Journal of Physical Chemistry A (2006), 110(26),

8158-8166

CODEN: JPCAFH; ISSN: 1089-5639

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal English

LANGUAGE:

D. functional theory (B3LYP//6-311+G\*) calcns. including Poisson-Boltzmann implicit solvent and NMR were used to study the formation of a series of parasubstituted triphenylboroxine amine adducts with respect to their phenylboronic acid monomers and free amine in solution Authors calcns. suggest that the intermediate prior to forming trimer amine is a dimer amine adduct. Formation of dimer amine can proceed via two pathways. Electrondonating substituents favor dimerization of two monomers before addition of the amine, and electron-withdrawing substituents favor formation of a monomer amine adduct before addition of the second monomer. Also found that  $\pi$ electron acceptors destabilize formation of the dimer and trimer with respect to its monomers. Electron-withdrawing substituents favor adduct formation. Adduct formation is enthalpically stabilized by increasing the polarity of the solvent but differential solubility of the monomer compared to trimer amine also has an effect on the equilibrium constant

ΙT 905731-98-8

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(B3LYP DFT study of effect of para-substituents and solvent polarity on formation of triphenylboroxine amine adducts)

RN 905731-98-8 CAPLUS

CN Boron, (4-acetylphenyl)amminedihydroxy-, (T-4)- (CA INDEX NAME)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:315088 CAPLUS Full-text

DOCUMENT NUMBER: 145:290

TITLE: Anticancer activities of novel chalcone and

bis-chalcone derivatives

AUTHOR(S): Modzelewska, Aneta; Pettit, Catherine; Achanta,

Geetha; Davidson, Nancy E.; Huang, Peng; Khan, Saeed

Division of Chemical Therapeutics, Sidney Kimmel CORPORATE SOURCE . Comprehensive Cancer Center at Johns Hopkins,

Baltimore, MD, 21231, USA

SOURCE: Bioorganic & Medicinal Chemistry (2006), 14(10),

3491-3495

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier B.V. DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:290

Ι

- AB A series of novel chalcones and bis-chalcones containing boronic acid moieties has been synthesized and evaluated for antitumor activity against the human breast cancer MDA-MB-231 (estrogen receptor-neg.) and MCF7 (estrogen receptor-pos.) cell lines and against two normal breast epithelial cell lines, MCF-10A and MCF-12A. These mols. inhibited the growth of the human breast cancer cell lines at low micromolar to nanomolar concns., with five of them showing preferential inhibition of the human breast cancer cell lines. Furthermore, bis-chalcone I exhibited a more potent inhibition of colon cancer cells expressing wild-type p53 than of an isogenic cell line that was p53-null.
- IT 888203-69-8P 888203-70-1P
  RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
  (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
  (Uses)
- (anticancer activities of chalcone and bis-chalcone derivs.)
- RN 888203-69-8 CAPLUS
- CN Boronic acid, B-[4-[1-oxo-3-(2-thienyl)-2-propen-1-yl]phenyl]- (CA INDEX NAME)

- RN 888203-70-1 CAPLUS
- CN Boronic acid, B-[4-(3-benzo[b]thien-2-yl-1-oxo-2-propen-1-yl)phenyl]- (CA INDEX NAME)

17

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1198318 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 143:449140

TITLE: Anthracenes, and their organic electroluminescent devices showing long service life and good durability

INVENTOR(S): Inoue, Koji; Aoki, Yoji; Kagayama, Akifumi; Tamatani,

Hiroaki; Totani, Yoshiyuki PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 72 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent LANGHAGE . Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005314239	A	20051110	JP 2004-131405	20040427
PRIORITY APPLN. INFO.:			JP 2004-131405	20040427
OTHER SOURCE(S):	MARPAT	143:449140		
GI				

$$Y^4$$
  $Y^5$  I

 $X^2$ 
 $X^2$ 
 $X^2$ 
 $X^3$ 
 $X^4$ 
 $X^4$ 
 $X^5$ 
 $X^4$ 
 $X^5$ 
 $X^4$ 
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 $X^5$ 
 $X^4$ 
 $X^5$ 
 $X^4$ 
 $X^5$ 
 $X^5$ 
 $X^7$ 
 $X$ 

- The anthracenes are I (Y1-Y10 = H, halo, CN, NO2, etc.; ≥1 of Y1-Y10 = II or AB III; R1, R2 = H, halo, CN, NO2, etc.; R3 = CN, amino, ester, alkylcarbonyl, etc.; X1, X2 = 0, S; n = 0, 1). Thus, I (all Y1-Y8 = H, Y9 = Ph, Y10 = 1dibenzofuranyl) was manufactured and used for an emitter layer for a blueemitting organic electroluminescent device.
- 868380-15-8

RL: RCT (Reactant); RACT (Reactant or reagent) (anthracenes for organic electroluminescent devices showing long service life and good durability)

- RN 868380-15-8 CAPLUS
- CN Boronic acid, B-[4-(2-phenylacetyl)phenyl]- (CA INDEX NAME)

L26 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:456229 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 139:41804

TITLE: Pharmaceutical compositions containing vitamin D

analogues

INVENTOR(S): Bernardon, Jean Michel; Biadatti, Thibaud

PATENT ASSIGNEE(S): Galderma Research & Development, Fr. SOURCE: Fr. Demande, 55 pp.

Patent

CODEN: FRXXBL

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT										LICAT				D.	ATE	
	2833										2001-				2	0011	210
FR	2833	258			B1		2004	0827									
CA	2468	892			A1		2003	0619		CA	2002- 2002-	2468	892		2	0021	206
WO	2003	0500	67		A2		2003	0619		WO	2002-	FR42	16		2	0021	206
WO	2003	0500	67		A3		2004	0304									
										BB	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM.	HR,	HU,	ID,	IL,	IN.	IS.	JP,	KE	, KG,	KP,	KR.	KZ,	LC.	LK,	LR.
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL	, TJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG	, CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL	, PT,	SE,	SI,	SK,	TR,	BF,	ВJ,
											, MR,						
AU	2002	3665	78		A1		2003	0623		AU	2002-	3665	78		2	0021	206
AU	2002	3665	78		B2		2008	0508									
											2002-						
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	SK		
BR	2002	0151	24		A		2004	1103		BR	2002- 2003- 2002-	1512	4		2	0021	206
JP	2005	5117	31		T		2005	0428		JP	2003-	5510	95		2	0021	206
CN	1620	414			A		2005	0525		CN	2002-	8279	53		2	0021	206
CN	1003	7653	0		С		2008	0326									
RU	2301	794			C2		2007	0627		RU	2004-	1211	74		2	0021	206
			259		A1		2003	1016		US	2002-	3151	21		2	0021	210
US	6924	400			В2		2005	0802									
ZA	2004	0038	45		A		2005	0104		$z_{A}$	2004- 2004-	3845			2	0040	519
MX	2004	0055	52		A		2004	0910		MX	2004-	5552			2	0040	508
					A		2007	0525			2004-					0040	
PRIORIT	Y APP	LN.	INFO	.:							2001-						
										US	2002-	3514	33P	1	P 2	0020	128

WO 2002-FR4216 W 20021206

OTHER SOURCE(S): MARPAT 139:41804

AB Preparation of tri-aromatic analogs of vitamin D (Markush structures given) are disclosed for use in pharmaceutical, veterinary, or cosmetic compns. Thus, {5-(6,2'-diethyl-4'-(1-ethyl-1-hydroxypropyl)biphenyl-3-yloxymethyl)-2- hydroxymethyl-phenyl|methanol (I) was prepared by the reaction of 1-5'-(3,4-bis-hydroxymethyl-benzyloxy)-2,2'-diethylbiphenyl-4-ylpropan-1- one with Et magnesium bromide and purification of I over silica (m.p. 93°). Cell differentiation activity of I was studied on HL60 cells. A tablet contained I 0.005, pregelatinized starch 0.065, microcryst. cellulose 0.075, lactose 0.050, and magnesium stearate 0.005 g.

IT 540495-55-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceutical compns. containing vitamin D analogs)

RN 540495-55-4 CAPLUS

CN Boronic acid, [2-methyl-4-(1-oxopropyl)phenyl]- (9CI) (CA INDEX NAME)

HO\_B

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:22884 CAPLUS Full-text

DOCUMENT NUMBER: 138:90649

TITLE: Aryl boronate functionalized polymers for treating

obesity and inhibiting fat uptake

Polomoscanik, Steven C.
PATENT ASSIGNEE(S): Geltex Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 92 pp.

SOURCE: PCT Int. Appl., 92 pg CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI	, CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		NE.	SN,	TD,	TG												
US	2003	0059	399		A1		2003	0327		US	2002-	1873	16		2	0020	627
US	7041	280			B2		2006	0509									
CA	2487	1857			A1		2003	0109		CA	2002-	2487	857		2	0020	701
AU	2002	3184	70		A1		2003	0303		AU	2002-	3184	70		2	0020	701
AU	2002	3184	70		B2		2005	0908									
EP	1404	686			A1		2004	0407		EΡ	2002-	7480	36		2	0020	701
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL	, TR,	BG,	CZ,	EE,	SK		
JP	2004	5348	87		T		2004	1118		JP	2003-	5089	52		2	0020	701
US	2006	0128	663		A1		2006	0615		US	2006-	3421	29		2	0060	127
US	2006	0127	353		A1		2006	0615		US	2006-	3493	57		2	0060	206
PRIORIT?	Y APE	LN.	INFO	.:						US	2001-	3022	21P	1	? 2	0010	629
										US	2002-	3594	73P	1	? 2	0020	222
										US	2001-	3020	81P	1	? 2	0010	629
										US	2002-	3594	67P	1	? 2	0020	222
										US	2002-	3594	74P	1	? 2	0020	222
											2002-			Ä		0020	
											2002-					0020	
										WO	2002-	US20	947	1	1 2	0020	701

- AB Polymers comprise ≥1 Ph boronate ester, boronamide or boronate thioester groups. The Ph boronate ester, boronamide and boronate thioester groups are represented by structural formulas -ZB(Ar)Z- or HOB(Ar)Z- where Ar is substituted or unsubstituted; and each Z is O, NH or S. Pharmaceutically acceptable salts of the polymer are also included. The aryl boronate ester, boronamide or boronate thioester can be cleaved to release the corresponding aryl boronic acid. Pharmaceutical compns. comprise the polymers and a pharmaceutically acceptable carrier or diluent; for treating obesity. The 4-(14'-trimethylammonium 3'-thia-1'-ketotetradecyl)-3-fluorophenylboronic acid bromide salt of poly(N-diethanolaminopropyl)acrylamide showed in vitro lipase assay IC50 5.2 mg/g fat.
- IΤ 481725-35-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(precursors and arvl boronate-functionalized polymers for treating obesity)

481725-35-3 CAPLUS RN

CN Boronic acid, B-(4-acetyl-3-fluorophenyl)- (CA INDEX NAME)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: INVENTOR(S):

L26 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN 2003:22883 CAPLUS Full-text

> Preparation of arvl boronic acids for treating obesity Holmes-Farley, Stephen Randall; Mandeville, W. Harry, III: Huval, Chad Cori; Li, Xinhua; Dhal, Pradeep K.

PATENT ASSIGNEE(S): Geltex Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 62 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----WO 2003002570 A1 20030109 WO 2002-US20923 20020701 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003064963 A1 20030403 US 2002-187397 20020627 US 6858592 B2 20050222 CA 2489681 A1 20030109 CA 2002-2489681 20020701 AU 2002316499 A1 20030303 AU 2002-316499 20020701 AU 2002316499 B2 20050804 EP 1404685 A1 20040407 EP 2002-746808 20020701 EP 1404685 B1 20060913 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK JP 2004535452 T 20041125 JP 2003-508951 20020701 JP 2004535452 T 20041125 JP 2003-508951
AT 339426 T 20061015 AT 2002-746808
ES 2275888 T3 20070616 ES 2002-746808
HK 1065046 A1 20061117 HK 2004-107699
US 20050107336 A1 20050519 US 2004-27643
US 7049304 B2 20060523
AU 2005220192 A1 20051201 AU 2005-220192
US 20060128664 A1 20060615 US 2006-343598
US 7456156 B2 20081125
US 20060127353 A1 20060615 US 2006-349357
PRIORITY APPLN. INFO.:
US 2002-3359467P 20020701 20020701 20041230 20060131 US 2006-349357 20060206
US 2001-302081P P 20010629
US 2002-359467P P 20020222
US 2001-302221P P 20010629
US 2002-359473P P 20020222
US 2002-359473P P 20020222
US 2002-187315 Al 20020627
US 2002-187397 Al 20020627
US 2002-187397 Al 20020627
US 2004-27643 Al 20041230

OTHER SOURCE(S): MARPAT 138:73376

GI

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Aryl boronic acids [e.g., I; wherein Ph ring A is substituted or unsubstituted; R = (substituted) straight chained hydrocarbyl group optionally comprising one or more ether, thioether, phenylene, amine, or ammonium linking

June 2, 2009

groups; Y = amine, ammonium group] were prepared For example,  $4-(14^{\circ}-\text{trimethylammonium-}3^{\circ}-\text{thia-}1^{\circ}-\text{ketotetradecyl})-3-\text{fluorophenylboronic}$  acid chloride [(II)Cl-] was prepared in six steps from 4-cyano-3-fluorophenyl bromide. The prepared compds. are useful for treating obesity, and inhibiting the uptake of fat in the gastrointestinal tract. For example, (II)Br-showed good inhibition of in vitro [IC50 ( $\mu$ g/g fat) = 1.8] and in vivo [ED50 ( $\mu$ g/g fat) = 2) pancreatic lipolysis.

IT 481725-35-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryl boronic acids for treating obesity)

RN 481725-35-3 CAPLUS

CN Boronic acid, B-(4-acetyl-3-fluorophenyl)- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1997:132770 CAPLUS Full-text

DOCUMENT NUMBER: 126:144291

ORIGINAL REFERENCE NO.: 126:27885a,27888a

TITLE: N-pyrazinyl-2-phenyl-3-pyridinesulfonamides and analogs endothelin receptor antagonists
INVENTOR(S): Bradburv, Robert Huch; Butlin, Roger John; James,

Roger

PATENT ASSIGNEE(S): Zeneca Limited, UK SOURCE: PCT Int. Appl., 108 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
WO	9640	681			A1		1996	1219		WO 1	996-	GB12	95		1	9960	603
	W:	AL,	AM,	AT,	AU,	AZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,
		ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KΕ,	KG,	KP,	KR,	ΚZ,	LK,	LR,	LS,
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,
		SE,	SG														
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
		IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN	
CA	2219	742			A1		1996	1219		CA 1	996-	2219	742		1	9960	603
CA	2219	742			С		2007	0116									
AU	9658	403			A		1996	1230		AU 1	996-	5840	3		1	9960	603
AU	7150	41			B2		2000	0113									
EP	8320	82			A1		1998	0401		EP 1	996-	9199	41		1	9960	603
EP	8320	82			B1		2001	1121									

	R:					ES,	FR,	GB,	GF	R, I	Τ,	LI,	LU,	NL,	SE	, MC,	PT,
			SI,	LT,	LV,												
	1192				A		0909		CN	199	6-1	961	49			19960	603
	1097				С		1225										
BR	9608	611			A	1999	0511		BR	199	6-8	611				19960	603
JP	1150	9175			T	1999	0817		JΡ	199	7-5	002	09			19960	603
JP	3193	058			B2	2001	0730										
	9802				A2		1028		HU	199	8-2	300				19960	603
HU	9802	300			A3	2002	0228										
NZ	3086	19			A	2000	0128		NZ	199	6-3	086	19			19960	603
RU	2172	738			C2	2001	0827		RU	199	8-1	000	54			19960	603
AT	2092	00			T	2001	1215		ΑT	199	6-9	199	41			19960	603
	2823				В6		0107			199						19960	
	2893				В6		0116									19960	603
	1224				A		0523			199						19960	
ES	2168	487			Т3	2002	0616			199						19960	603
	1878				В1	2004	1029						60			19960	603
ZA	9604	615			Α	1996	1209		$z_{A}$	199	6-4	615				19960	604
US	5866	568			Α	1999	0202		US	199	6-6	589	69			19960	604
IN	1996	DE01	209		A	2005	0311		IΝ	199	6-D	E12	09			19960	604
HR	9600	272			B1	2006	0630		HR	199	6-2	72				19960	606
	9705				A		1205		NO	199	7-5	700				19971	205
	3145				B1	2003											
	1005				A1		1220			199						19980	
	6060				A		0509			199						19981	
	6258				B1	2001	0710		US	200	0-5	043	64			20000	215
PRIORIT	Y APP	LN.	INFO	. :									7		A	19950	607
										199						19950	
													95			19960	
													69			19960	
									US	199	8-2	114	83		A3	19981	214

OTHER SOURCE(S): MARPAT 126:144291 GI

- AB Title compds. [I; A = atoms to complete an (un)substituted pyridine ring; R = (un)substituted Ph; R1 = (un)substituted heteroarom. ring containing 2 N atoms] were prepared Thus, iso-Bu N-(3-methoxy-5-methyl-2-pyrazinyl)carbamate was amidated by 2-chloropyridine-3-sulfonyl chloride (preparation each given) and the product arylated by 4-(Me2CHCH2)C6H4B(OH)2 to give, after deprotection, title compound II. Data for biol activity of I were civen.
- IT 186498-36-2, 4-Propanoylphenylboronic acid RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of n-pyrazinyl-2-phenyl-3-pyridinesulfonamides and analogs endothelin receptor antagonists)

- 186498-36-2 CAPLUS
- CN Boronic acid, B-[4-(1-oxopropyl)phenyl]- (CA INDEX NAME)

- 186498-24-8P 186498-27-1P
  - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
    - (preparation of n-pyraziny1-2-pheny1-3-pyridinesulfonamides and analogs endothelin receptor antagonists)
- RN 186498-24-8 CAPLUS
- Boronic acid, [4-(1-oxobutyl)phenyl]- (9CI) (CA INDEX NAME) CN

- 186498-27-1 CAPLUS
- CN Boronic acid, [4-(2-methyl-1-oxopropyl)phenyl]- (9CI) (CA INDEX NAME)

- REFERENCE COUNT:
- THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

632 References for one proviso cmpd. Sample of references:

=> d gue 127

1.24 1 SEA FILE-REGISTRY SPE-ON ABB-ON PLU-ON 149104-90-5 L27 632 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L24

=> d 127 1-3 630-632 ibib abs hitstr

L27 ANSWER 1 OF 632 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:556608 CAPLUS Full-text

TITLE: Polycyclic indazole derivatives that are ERK inhibitors and their preparation, pharmaceutical compositions and use in the treatment of cancer

INVENTOR(S): Cooper, Alan B.; Deng, Yongqi; Shipps, Gerald W., Jr.; Shih, Neng-Yang; Zhu, Hugh Y.; Sun, Robert; Kelly, Joseph M.; Doll, Ronald J.; Nan, Yang; Wang, Tong; Desai, Jagdish A.; Wang, James J-S.; Dong, Youhao;

Madison, Vincent S.; Xiao, Li; Hruza, Alan W.; Siddiqui, M. Arshad; Samatar, Ahmed A.; Paliwal, Sunil; Tsui, Hon-Chung; Celebi, Azim Alan; Wu, Yiji; Boga, Sobhana Babu; Alhassan, Abdul-Basit; Gao,

Xiaolei; Zhu, Liang; Patel, Mehul USA

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 473pp., Cont.-in-part of U.S. Ser. No. 636,954.

CODEN: USXXCO Patent

DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT:	ION	NO.		D.	ATE	
						-									-		
US	2009	0118	284		A1		2009	0507		US 2	007-	8102	82		2	0070	605
US	2007	0191	604		A1		2007	0816		US 2	006-	6369.	54		2	0061:	211
WO	2008	1538	58		A1		2008	1218		WO 2	008-	US69	79		2	0080	504
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw			
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
		AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM							
PRIORIT:	APP	LN.	INFO	. :						US 2	005-	7498	56P	1	P 2	0051	213
										US 2	006-	6369.	54		A2 2	0061	211
										US 2	007-	8102	82	- 2	A 2	0070	605

GΙ

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Disclosed are the ERK inhibitors of formula I and the pharmaceutically AB acceptable salts, esters and solvates thereof. Compds. of formula I wherein Q is (un)substituted piperidine or piperazine ring that can have a bridge or a fused ring; Y1, Y2, and Y3 are independently CH=, N=, etc.; n is 1 to 3; R1 is CN, NO2, OH and derivs., SH and derivs., acyl, etc.; R2 is H, CN, halo, (un) substituted alkyl, alkynyl, alkenyl, etc.; R8 is H, OH, NH2 and derivs., alkyl, and aminocarbonyl; each R35 is independently H and C1-6 alkyl; and their pharmaceutically acceptable salts thereof, are claimed. Also disclosed are methods of treating cancer using the compds. of formula I. Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their ERK inhibitory activity. From the assay, it was determined that compound II exhibited IC50 value in the range of 0.16 - 18 nM.

149104-90-5

RN

RL: RCT (Reactant); RACT (Reactant or reagent) (starting material; preparation of polycyclic indazole derivs. as ERK inhibitors and their use in the treatment and prevention of cancer) 149104-90-5 CAPLUS

CN Boronic acid, B-(4-acetylphenyl)- (CA INDEX NAME)

1.27 ANSWER 2 OF 632 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:555535 CAPLUS Full-text

DOCUMENT NUMBER: 150:494893

TITLE:

Preparation of heteroaryl ethers for treatment of oncological diseases

INVENTOR(S): Mansour, Tarek Suhayl; Wacharasindhu, Sumrit; Wan,

Zhao-Kui; Bardhan, Sujata Wyeth, John, and Brother Ltd., USA

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 131pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA:	TENT I	NO.			KIN	D	DATE			APPL	ICAT:	ION I	NO.		D	ATE	
						_											
WO	2009	0589	37		A2		2009	0507		WO 2	008-	US81	693		21	0081	030
	W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,	TJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW		
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,

AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2007-984477P P 20071101

The title heteroaryl ethers with general formula Rt-O-Ar [wherein Rt = a heterocycle selected from (un)substituted quinazoline, thieno[2,3-d]pyrimidine, pyrimidine, etc.; Ar = (un)substituted Ph, pyridine, isoxazole, etc.] were prepared for the treatment of oncol. diseases, including inflammation. For example, 4-(pyrimidin-5-yloxy)quinazoline was synthesized from 4-[(3H-[1,2,3]triazolo]4,5-b]pyridin-3-yloxy]thieno[2,3-d]pyrimidine and 3-cyanophenylboronic acid in presence of Cs2CO3 and Pd(PPh3)4 in DME, and purified by flash chromatog. as a white solid in 88 % yield. 4-(Pyrimidin-5-yloxy)quinazoline showed Pl3-Kinase inhibitory activities against Pl3Ka and Pl3Ky with inhibition rates of 33 % and 53 % at 30 µM, resp. 4-(Pyrimidin-5-yloxy)quinazoline also showed mTOR enzyme inhibitory activity with inhibition rate of 12 % at 10 µM.

IT 149104-90-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of heteroaryl ethers for treatment of oncol. diseases)

RN 149104-90-5 CAPLUS

CN Boronic acid, B-(4-acetylphenyl)- (CA INDEX NAME)



L27 ANSWER 3 OF 632 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:507094 CAPLUS Full-text

TITLE: Homocoupling of Arylboronic Acids Catalyzed by

1,10-Phenanthroline-Ligated Copper Complexes in Air

AUTHOR(S): Kirai, Naohiro; Yamamoto, Yoshihiko

CORPORATE SOURCE: Department of Applied Chemistry, Graduate School of

Science and Engineering, Tokyo Institute of

Technology, O-okayama, Meguro-ku, Tokyo, 152-8552,

Japan

SOURCE: European Journal of Organic Chemistry (2009), (12),

1864-1867, S1864/1-S1864/4 CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

AB The efficient homocoupling of arylboronic acids was achieved by using the catalytic combination of inexpensive copper salts and 1,10-phenanthroline as a liqand. The homocoupling reaction proceeds at ambient temperature in air without any additives such as base or oxidant. This method tolerates various substituents on the arylboronic acids such as halogens, carbonyls, and a nitro group. As a result, 25 sym. biaryls were obtained from readily available arylboronic acids in 19-92 % isolated yields. A binuclear (µ-hydroxido)copper complex is assumed as the catalytically active species, which undergoes efficient transmetalation with arylboronic acids to produce dinuclear arylcopper complexes. The binuclear structure is assumed to be essential for the bimetallic reductive elimination of biaryls as well as the oxidative restoration of the catalyst. Copyright Wiley-VCH Verlag GmbH & Co. KGaA, 69451 Weinheim, Germany, 2009.

IT INDEXING IN PROGRESS

IT 149104-90-5, 4-Acetylphenylboronic acid

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of sym. biaryls via copper-catalyzed transmetalation and

homocoupling of arylboronic acids)
RN 149104-90-5 CAPLUS

CN Boronic acid, B-(4-acetylphenyl)- (CA INDEX NAME)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 630 OF 632 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1995:216801 CAPLUS Full-text

DOCUMENT NUMBER: 122:10068

ORIGINAL REFERENCE NO.: 122:2237a,2240a
TITLE: Preparation of heterocyclylethanone compounds as 5-HTID antagonists.

INVENTOR(S): Scopes, David Ian Carter; Campbell, Ian Baxter

PATENT ASSIGNEE(S): Glaxo Group Ltd., UK SOURCE: Brit. UK Pat. Appl., 48 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

GB 2276160 A 19940921 GB 1993-5459 19930317

PRIORITY APPLN. INFO:: GB 1993-5459 19930317

OTHER SOURCE(S): MARPAT 122:10068

GI

- Title compds. I (R1 = H, halo, C1-6 alkyl, C1-6 alkoxy; R2 = (substituted)Ph, (substituted) C1-4 alkoxyxlkyl, (substituted) oxadiazolyl, (substituted)imidazolyl, (substituted)dioxolanyl, (substituted)thioxolanyl, (substituted)pyridinyl; R3 = R14R13N(CH2)n wherein R13, R14 = H, C1-6 alkyl, n = 2-4, b, c wherein p, q = 1-3, R15 = R13; X = COCH2, CH2CO) or a salt thereof, 5-HT1D antagonists useful in treatment of CNS disorders, endocrine disorders and sexual dysfunction (no data), are prepared 2-(4-Bromophenyl)-1-[4-methoxy-3-(4-methyl-1- piperazinyl)phenyl]-1-ethanone (preparation given), 4-pyridinylboronic acid, Pd(Ph3P)4, DME and aqueous Na2CO3 were refluxed to give II.
- 149104-90-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
  - (preparation of heterocyclylethanone compds. as 5-HT1D antagonists)
- RN 149104-90-5 CAPLUS
- CN Boronic acid, B-(4-acetylphenyl)- (CA INDEX NAME)

L27 ANSWER 631 OF 632 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1994:700771 CAPLUS Full-text

DOCUMENT NUMBER: 121:300771

ORIGINAL REFERENCE NO.: 121:55057a,55060a

TITLE: Preparation of piperidinyl anilines and -benzanilides INVENTOR(S): Oxford, Alexander William; Clitherow, John Watson

PATENT ASSIGNEE(S): Glaxo Group Ltd., UK SOURCE:

Brit. UK Pat. Appl., 42 pp.

CODEN: BAXXDU DOCUMENT TYPE: Patent

LANGUAGE .

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2276162	A	19940921	GB 1993-5469	19930317
PRIORITY APPLN. INFO.:			GB 1993-5469	19930317
OTHER SOURCE(S):	MARPAT	121:300771		
GI				

$$\begin{array}{c} \mathbb{R}^{1} & \mathbb{C}(CH2)_{p} & \mathbb{R}^{2} \\ \mathbb{R}^{2} & \mathbb{R}^{2} \mathbb{R}^{2} & \mathbb{R}^{2} & \mathbb{R}^{2} & \mathbb{R}^{2} \\ \mathbb{R}^{2} & \mathbb{R}^{2} & \mathbb{R}^{2} & \mathbb{R}^{2} \\ \mathbb{R}^{2} & \mathbb{R}^{2} & \mathbb{R}^{2} \\$$

English

- AB Title compds. I (R1 = H, halo, C1-6 alkv1, C1-6 alkoxv; R2, R3 = H, halo, H0, C1-6 alkoxy, C1-6 alkyl; R4 = H, C1-6 alkyl; Ar = (substituted) Ph, oxadiazolyl, imidazolylmethyl, dioxolanyl, thioxolanyl, (substituted)pyridinyl; X = CONH, NHCO, NHCH2, CH2NH; p, q = 1-3) or a salt or solvate thereof, 5-HT1D antagonists useful in treatment of CNS or endocrine disorders and sexual dysfunction (no data), are prepared 4-Methoxy-3-[2-(1methyl-2-piperidinyl)ethyl]benzoic acid, HI (preparation given) in pyridine was reacted with 4'-amino-[1,1'-biphenyl]-4-sulfonamide to give the free base with was treated with oxalic acid to give the title compound II. IT 149104-90-5P
  - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperidinyl anilines and -benzanilides as 5-HT1D antagonists)

- RN 149104-90-5 CAPLUS
- CN Boronic acid, B-(4-acetylphenyl)- (CA INDEX NAME)

L27 ANSWER 632 OF 632 CAPLUS COPYRIGHT 2009 ACS on STN 1993:539268 CAPLUS <u>Full-text</u> ACCESSION NUMBER: DOCUMENT NUMBER: 119:139268

ORIGINAL REFERENCE NO.: 119:24983a,24986a

TITLE: Preparation of piperazinylbenzanilide derivatives as

5-HT1D antagonists

INVENTOR(S): Oxford, Alexander William; Mitchell, William Leonard; Bradshaw, John; Clitherow, John Watson; Baxter, Ian

Campbell

PATENT ASSIGNEE(S): Glaxo Group Ltd., UK

SOURCE: Eur. Pat. Appl., 43 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 533266	A1	19930324	EP 1992-202804	19920914
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI,	LU, MC, NL, PT, SE
CA 2078506	A1	19930319	CA 1992-2078506	19920917
NO 9203617	A	19930319	NO 1992-3617	19920917
AU 9224529	A	19930325	AU 1992-24529	19920917
CN 1071922	A	19930512	CN 1992-111662	19920917
ZA 9207107	A	19930908	ZA 1992-7107	19920917
JP 06107649	A	19940419	JP 1992-273659	19920917
US 5356893	A	19941018	US 1992-945878	19920917
HU 66319	A2	19941128	HU 1992-2969	19920917
PRIORITY APPLN. INFO.:			GB 1991-19920	A 19910918
OTHER SOURCE(S):	MARPAT	119:1392	58	

$$\mathbb{R}^{1} \longrightarrow \mathbb{C}^{NH} \longrightarrow \mathbb{R}^{3}$$

- AB Title compds. [I; R1 = H, halo, alkyl, alkoxy; R2 = (substituted) Ph; R3 = H, alkyl; R4, R5 = H, halo, OH, alkoxy, alkyl], were prepared as 5-HT1D antagonists (no data). Thus, 4-(tert-butyldimethylsiloxy)phenylboronic acid, bimol. anhydride (preparation given) and 4-bromo-N-[4-methoxy-3-(4-methyl-1piperazinyl)phenyl]benzamide (preparation given) were refluxed with (Ph3P)4Pd and Na2CO3 in 1,2-dimethoxyethane to give 4'-hydroxy-N-[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]-1-(1,1'- biphenyl)-4-carboxamide.
- 149104-90-5P, 4-Acetylphenylboronic acid

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as intermediate for piperazinylbenzanilide 5-HT1D

antagonist)

RN 149104-90-5 CAPLUS

Boronic acid, B-(4-acetylphenyl)- (CA INDEX NAME) CN

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FILE 'REGISTRY' ENTERED AT 10:23:22 ON 02 JUN 2009 ACT KRISH751/A

STR

T. 2 3407 SEA SSS FUL L1

ACT NIZAL751A/A

L3 STR

L4 ( 3407) SEA SSS FUL L3 L5 STR

L6 (

2289) SEA SUB=L4 SSS FUL L5 L7 STR

L8

3 SEA SUB=L6 SSS FUL L7

ACT NIZAL751B/A

L9 STR L10 (

3407) SEA SSS FUL L9 L11 STR

L12 ( 2289) SEA SUB=L10 SSS FUL L11 L13 STR

L14 0 SEA SUB=L12 SSS FUL L13

T.15 STR

2 SEA SSS SAM L15 L16

L17 2 SEA SUB=L2 SSS SAM L15 19 SEA SUB=L2 SSS FUL L15 L18

FILE 'CAPLUS' ENTERED AT 10:38:19 ON 02 JUN 2009 L19 643 SEA SPE=ON ABB=ON PLU=ON L18

FILE 'REGISTRY' ENTERED AT 10:38:30 ON 02 JUN 2009

L20 STR L15

L21 13 SEA SUB=L2 SSS FUL L20

FILE 'CAPLUS' ENTERED AT 10:39:01 ON 02 JUN 2009 639 SEA SPE=ON ABB=ON PLU=ON L21

L22 L23 ANALYZE PLU=ON L19 1-643 RN: 51004 TERMS (TERM LIMIT EXCEEDED)

FILE 'REGISTRY' ENTERED AT 10:41:54 ON 02 JUN 2009 L24 1 SEA SPE=ON ABB=ON PLU=ON 149104-90-5 D SCA

1.25 18 SEA SPE-ON ABB-ON PLU-ON L18 NOT L24

FILE 'CAPLUS' ENTERED AT 10:42:16 ON 02 JUN 2009 L26 21 SEA SPE=ON ABB=ON PLU=ON L25 L27 632 SEA SPE=ON ABB=ON PLU=ON L24

5 SEA SPE=ON ABB=ON PLU=ON L8 L28

25 SEA SPE=ON ABB=ON PLU=ON L26 OR L28 L29

FILE 'CAPLUS' ENTERED AT 10:43:20 ON 02 JUN 2009

FILE 'REGISTRY' ENTERED AT 10:43:50 ON 02 JUN 2009 D OUE L14

FILE 'CAPLUS' ENTERED AT 10:43:56 ON 02 JUN 2009

D QUE L28

D L28 IBIB ABS HITSTR TOT

D OUE L26

D L26 IBIB ABS HITSTR TOT

D OUE L27

D L27 1-3 630-632 IBIB ABS HITSTR

## FILE HOME

## FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUN 2009 HIGHEST RN 1151607-22-5 DICTIONARY FILE UPDATES: 1 JUN 2009 HIGHEST RN 1151607-22-5

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http://www.cas.org/support/stngen/stndoc/properties.html

## FILE CAPLUS

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FILE COVERS 1907 - 2 Jun 2009 VOL 150 ISS 23 FILE LAST UPDATED: 1 Jun 2009 (20090601/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

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